Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 4 with the following amended paragraph:

This application is a continuation of U.S. Application No. 09/774,397, filed January 31, 2001 which claims priority from U.S. Provisional Application Serial No. 60/179,201, filed January 31, 2000. The content of the prior applications is incorporated herein by reference in its entirety.

Please replace the paragraph beginning at page 10, line 12, with the following rewritten paragraph:

Some embodiments of the invention include a polymer hydrogel layer 22 adhered to the support 12 or to a layer of cells 26 adhered to the support 12. The polymer hydrogel layer 22 can be any biocompatible, bioresorbable polymer gel that provides an aqueous milieu for cell migration and neurotrophic agent diffusion. The hydrogel can be natural or synthetic. The hydrogel layer 22 can have a thickness from 5 to 120 μm, preferably from 10 to 50 μm, e.g., approximately 20, 25 or 30 μm. Optimal hydrogel thickness depends on factors such as the diameter of the nerve being repaired and the number and diameter of microspheres 24 (if any) to be accommodated in the hydrogel layer 22. Exemplary materials for use in a polymer hydrogel layer 22 are fibrin glues, PLURONICS® hydrogels, polyethylene glycol (PEG) hydrogels, agarose gels, PolyHEMA (poly 2-hydroxyethylmethacrylate) hydrogels, PHPMA (poly N-(2-hydroxypropyl) methacrylamide) hydrogels, collagen gels, MATRIGEL® hydrogels, chitosan gels, gel mixtures (e.g., of collagen, laminin, fibronectin), alginate gels, and collagen-glycosaminoglycan gels. The hydrogel layer 22 can contain one or more neurotrophic agents or axon extension-promoting proteins. Such neurotrophic agents can be loaded directly into the hydrogel 22, loaded into microspheres 24, or incorporated into the support or spacers as described herein.